12-26-1991

An Economic Analysis of the 1990-1991 South Dakota Retained Ownership Demonstration; Soviet Republics and Grain Prices

Dillon Feuz  
*South Dakota State University*

John Wagner  
*South Dakota State University*

Richard Shane  
*South Dakota State University, richard.shane@sdstate.edu*

Follow this and additional works at: [http://openprairie.sdstate.edu/econ_comm](http://openprairie.sdstate.edu/econ_comm)

Part of the [Agricultural and Resource Economics Commons](http://openprairie.sdstate.edu/econ_comm), and the [Regional Economics Commons](http://openprairie.sdstate.edu/econ_comm)

**Recommended Citation**  
[http://openprairie.sdstate.edu/econ_comm/272](http://openprairie.sdstate.edu/econ_comm/272)

This Newsletter is brought to you for free and open access by the Department of Economics at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Economics Commentator by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.
An Economic Analysis of the 1990-1991
South Dakota Retained Ownership
Demonstration

by
Dillon Feuz
Livestock Marketing Economist
and
John Wagner, Extension
Ruminanat Nutrition Specialist

Retained ownership is a marketing strategy that involves maintaining ownership of young cattle beyond calf weaning, a traditional marketing time for many producers. Numerous retained ownership strategies exist. In order to fully evaluate the profit potential, it is extremely important for producers and their lenders to clearly understand the advantages and disadvantages of a specific retained ownership strategy.

The advantages and disadvantages of retained ownerships have been discussed by several authors. Advantages include 1) compensation for superior genetics, 2) reduction in market inefficiencies, 3) increased quality control in beef, 4) reduction in market risk for frost or drought damaged crops and 5) reduction in profitability peaks and valleys associated with cattle cycles.

Retained ownership of cattle is not without problems. Disadvantages include 1) increased risk of poor performance due to poor genetics, health problems or deteriorating environmental conditions, 2) increased financing requirements, 3) potential tax problems and 4) legal arrangements with potential commercial feedlot operators.

Nearly every economic analysis of retained ownership has shown an increase in profitability over traditional cow-calf operations. However, there is considerable variation in year to year returns as a result of market conditions.

(Continued on page 2)
Market Situation

The relative prices for steer calves, feeder calves, and slaughter steers are very important in determining the profitability of any retained ownership program. A retained ownership program that is profitable in one year may not be profitable on average or in any other year.

Many market analysts are looking for cattle prices to decline over the next few years as the cow herd inventory continues to grow. Retained ownership during 1992 will probably be difficult to show profitable as calf prices remain relatively strong this fall but yearling and slaughter prices are expected to decline into 1992. However, if by the fall of 1992 calf prices have also declined, then retained ownership in 1993-1996 could be profitable since the price roll back from calves to feeders and calves to slaughter steers generally is less pronounced in the lower priced years of the cattle cycle.

A producer may not be able to have any control over the general market prices. However, variation in retained ownership returns also occur due to different types of cattle and different retained ownership strategies.

S.D. Retained Ownership Demonstration

A 1990-91 South Dakota Retained Ownership Demonstration Project showed average profits of $38.75 and $16.69 for an accelerated finishing program and a traditional two-phased growing and finishing program, respectively. The variability in profitability between groups of cattle representing different genetic and management backgrounds was tremendous. Profitability ranged from a $56.57 loss to a $131.36 profit per head and 7 of 51 groups of five steers in the accelerated pen lost money. Profitability of the two-phased program steers ranged from -$39.57 to +$57.26 per head and 7 of 18 groups of five steers lost money.

What were the factors that influenced the probability of these steers? A few of the key factors are the subject of the remainder of this article.

Accelerated Finishing Program.

Average profitability of 255 steers fed an accelerated finishing program as part of the S.D. Retained Ownership Demonstration was $38.75 per head. Profitability of the 51 groups of five steers was extremely variable, however, ranging from -$56.57 to $131.36 per head. Table 1 displays the data divided into the low, middle and high profitability groups. The high profitability groups made nearly $75 per head. These cattle were initially heavier and older, gained weight more rapidly, were fed fewer days and graded an average of 62.9% Choice. Clearly, larger, growthier cattle with the propensity to grade Choice were well suited for the accelerated finishing program. Lighter cattle without the ability to gain 3 pounds daily and without the capability of grading Choice were not well suited for accelerated finishing.

<table>
<thead>
<tr>
<th>Low 1/3</th>
<th>Middle 1/3</th>
<th>High 1/3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit</td>
<td>-97.67</td>
<td>41.66</td>
</tr>
<tr>
<td>Initial Weight</td>
<td>561 554 605</td>
<td></td>
</tr>
<tr>
<td>Feedlot ADG</td>
<td>2.79 2.95 3.07</td>
<td></td>
</tr>
<tr>
<td>Days Fed</td>
<td>206 194   188</td>
<td></td>
</tr>
<tr>
<td>Percent Choice</td>
<td>28.5 47.6 62.9</td>
<td></td>
</tr>
</tbody>
</table>

Average daily gain was important as it relates to days on feed. As rate of gain increases, fewer days are required to reach market weight. Market prices were stronger earlier in the year and declined steadily through the spring until the slowest gaining cattle were sold. This trend has occurred over the past several years and will likely occur in the near future as more calves and fewer yearlings are placed on feed.

Generally, it is assumed that British cattle are not suited to accelerated finishing programs. The tendency in the industry is to grow these cattle on roughage programs in order to presumably increase slaughter weight. However, calves sired by Angus bulls appeared profitable under this accelerated feeding program due to their ability to grade Choice more readily than some of the other cattle.

Traditional Two-Phase Growing and Finishing Program. Average profitability of 90 steers fed a traditional, two-phased
program as part of the S.D. Retained Ownership Demonstration was $16.69 per head. Profitability of the 18 groups of five head varied from -$39.57 to $57.26 per head. Table 2 displays the information for the low, middle and high profitability groups.

Table 2. Factors affecting profitability of steers in two-phase growing and finishing program

<table>
<thead>
<tr>
<th></th>
<th>Low 1/2</th>
<th>Middle 1/3</th>
<th>High 1/3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit</td>
<td>-22.46</td>
<td>22.17</td>
<td>50.36</td>
</tr>
<tr>
<td>Initial Weight</td>
<td>492</td>
<td>498</td>
<td>522</td>
</tr>
<tr>
<td>Feedlot ADG</td>
<td>2.66</td>
<td>2.75</td>
<td>2.91</td>
</tr>
<tr>
<td>Days Fed</td>
<td>221</td>
<td>214</td>
<td>207</td>
</tr>
<tr>
<td>Percent Choice</td>
<td>20.3</td>
<td>96.7</td>
<td>70.0</td>
</tr>
</tbody>
</table>

The high profitability groups made $50.36 per head. These cattle were slightly heavier, older and larger framed initially. They gained weight more rapidly, were fed fewer days, had higher dressing percentages and graded an averaged of 70% Choice. Cattle in the lowest profitability group appeared to lack the ability to reach the Choice grade.

Angus sired cattle graded Choice more readily and were therefore profitable under this system. Cattle without the propensity to grade Choice were less profitable in this two-phased system. Profitability of Charolais and Gelbvieh sired cattle had $50 per head lower profits under the two-phased system than under the accelerated program. Cattle with the capability of gaining rapidly and reaching an acceptable market weight early should be pushed accordingly, especially if they do not have the potential to grade Choice.

Summary and Conclusions

Most retained ownership summaries have shown an improvement in profitability when examined over several years. However, considerable variation in profitability existed for cattle fed as part of the S.D. Retained Ownership Demonstration.

It appears as if heavy, older cattle at weaning should be fed a high energy finishing diet from weaning until slaughter. Cattle fed in a two-phase growing and finishing program need to grade Choice in order to be profitable because they are generally sold later in the year when the Choice-Select price spread is greater. Cattle that do not have the propensity to grade Choice are generally less suitable for retained ownership programs that take them to slaughter weights. However, some of these cattle may still work in backgrounding only or backgrounding to grass type retained ownership strategies.

(Soviet Republics ... cont’d from p.1)

which is up but be ready to price on a strong reversal in the market. News of exceptional growing conditions in the Southern Plains could cause wheat price to drop 30 to 40 cents very quickly. At current price levels, puts, synthetic puts and minimum price contracts should be evaluated as pricing alternatives.

Feed grains have not fared well in the allocation of credit to Soviet Republics. Less than expected credit dollars have kept corn and soybean prices on the defensive. Soybean stocks in the U.S. are at relatively high levels — exceeding 300 million bushels. This alone would keep the price in Chicago below the $6.00 level. Upside potential is further limited by good to excellent rainfall conditions in South America. Prospects look good for a production increase of two to three million metric tons in Brazilian and Argentinians production compared to last year. Also, U.S. acreage will most likely remain unchanged from last year. Spring weather in the U.S. corn belt will undoubtedly have major impacts on late spring and early summer price potential with no acreage increase.

Near term soybean price will benefit from strong export demand as South America is out of beans. U.S. stocks are the only supply available for export. Brazil won't have exportable supplies available until well into harvest in April. Any rallies will be limited but promise to at least cover storage cost into spring.

Price analysts are watching a weather pattern called El Nino very closely at this time. El Nino could lead to drought in the U.S. corn belt and price potential similar to 1983 and 1988 when soybean futures topped nine and ten dollar levels during the summer growing season. Although El Nino is possible in 1992, many analysts have concluded that 1993 is a more probable year for this weather
pattern to exist. Any dry weather developments this spring will lead to greater than usual price volatility because so many market participants are aware of El Nino and its potential. Expect weather rallies to be stronger, earlier and shorter than normal because of this psychological market factor.

Corn prices could be even more volatile than bean prices next spring as supplies are tight. Surplus carry over stocks could drop to as low as one billion bushels if feed demand remains strong and with wheat priced out of rations. Weather next spring will be the key factor in corn markets because acreage is expected to increase due to reductions in government set aside requirements. Furthermore, the corn-soybean price ratio favors the production of corn on flex acres across much of the corn belt. If U.S. yield moves back toward a trend near 120 bushels per acre, production could climb above eight billion bushels. The low carry over will be instrumental in keeping prices at least side ways under these conditions.

Credit offers to the Soviet Republics will also help keep corn prices steady through the winter as the allocations for February, March and April provide for fair amounts of feed grain export sales. If additional credit for feed grains is extended, corn prices will be able to mount a spring rally.

Be prepared to price remaining old crop and some new crop on spring rallies. Seasonal price increases will most likely at least cover the cost of storage through the winter months and even more if weather problems surface.

**************************************************
ECONOMICS COMMENTATOR

EDITOR: Donald C. Taylor, Agricultural Economist

ECONOMICS DEPARTMENT
South Dakota State University
Box 504A
Brookings, SD 57007
Phone: (605) 688 - 4141